

(11)Publication number:

06-310321

(43) Date of publication of application: 04.11.1994

(51)Int.CI.

H01F 1/34

CO1G 49/00 CO4B 35/38

(21)Application number : 05-095791

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(22)Date of filing:

22.04.1993

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## (54) OXIDE MAGNETIC SUBSTANCE MATERIAL

## (57)Abstract:

PURPOSE: To obtain an oxide magnetic substance material which is excellent in the temperature characteristic of a magnetic loss and whose magnetic loss is low by a method wherein at least CaO and SiO2 in a specific amount and at least one kind of a specific metal oxide are contained in an MnZn-based ferrite within a specific composition range.

CONSTITUTION: Fe2O2 at 61mol% or higher and 67mol% or lower, MnO at 3mol% or higher and 36mol% or lower and ZnO at 0mol% or higher and 30mol% or lower are contained as main compositions, and 0.05≤CaO≤0.5wt.% and 0.005≤SiO2≤0.2wt.% are contained as subcomponents. In addition, an oxide magnetic substance material is constituted as a sintered body which contains at least one kind of a metal oxide out of TiO2, CoO, CuO, SnO2 and NiO at 0.005wt.% or higher and 0.5wt.% or lower. Thereby, it is possible to obtain the material whose magnetic loss is low and whose temperature characteristic is excellent. A switching power supply using it generates little heat, is highly efficient and displays the small danger of a temperature runaway.

## **LEGAL STATUS**

[Date of request for examination]

[Date of sending the examiner's decision of rejection

Kind of final disposal of application other than the examiner's decision of rejection or application converted registration] [Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of

rejection]
[Date of requesting appeal against examiner's decision of rejection]
[Date of extinction of right]

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